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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

COLAIANNI, MICHAEL

ART UNIT

PAPER NUMBER

1731

8

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/078,536

Applicant(s)
Nichols et al.

Examiner
Michael Colaanni

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 21, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-40 and 43-63 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-40 and 43-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7 6) ☐ Other:

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Claim Objections

1. Claim 63 is objected to because of the following informalities: line 4, the typographical error “. 1.” should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 26-34, 37-40, 43-48, 50, 53-59, 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Bale et al. EP 227424.

Bale et al. teach a smoking article having a smoking material (Fig. 2, ref. no. 30); an ignition element in contact with the smoking material (Fig. 2, ref. no. 12, page 5, lines 5-8, the combustible wrapper 12 serves as both a wrapper and an ignition element as evidenced from the citation on page 5); a first layer of material formed around the smoking material and the ignition element (Fig. 2, ref. no. 14); a second layer of material formed around the first layer where the second layer reduces combustion of the first layer and the first layer is more combustible than the second layer (Fig. 2, ref. no. 16).

Bale et al. also teach the smoking material is tobacco based material (page 4, line 9).

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Bale et al. also teach the ignition element is a carbon-based material and is substantially cylindrical shaped and concentrically aligned with the longitudinal axis of the smoking article (page 2, lines 17-20, layer 12 is a "paper" material which is inherently a wood-based material and thus a carbon-based material).

Bale et al. also teach the second layer comprises a composite layer containing multiple layers, including a metal foil layer and one or two paper layers (Fig. 2, ref. no. 9, 16, 12, 14).

Bale et al. also teach that the second layer extends to the distal end of the article at which the smoking article is exposed (Fig. 2, ref. no. 9).

Bale et al. also teaches that the second layer has at least one perforation (Fig. 2, ref. No. 18, 19).

Bale et al. also teach the perforation is blocked by the first layer of material before use of the article (Fig. 2, ref. no. 12, 14, 18).

Bale et al. also teach that portions of the layer underlying the perforation are burned away during use of the article (abstract, page 5, lines 5-8, the inner wrapper 12 is burned away ("combustible") during use).

Bale et al. also teach the perforations are arranged in a pattern (Fig. 2, ref. no. 18, 19).

As to independent claim 18, as noted above, Bale et al. teach all that is claimed in claim 18, including the perforation being blocked by an occlusion (Fig. 2, ref. no. 12, 14, 18, 19, 16, abstract, page 5, lines 5-8, the inner wrapper 12 is burned away ("combustible") during use).

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Bale et al. also teach that the occlusion is a combustible filling material (Fig. 2, ref. no. 12, the occluding material 12 is combustible paper).

Bale et al. also teach occlusion is applied beneath the wrapper (Fig. 2, ref. no. 12).

Bale et al. also teach that at least one perforation is provided near a base end of the cigarette (page 4, lines 5-13, the cigarette paper and opening in the joint serves as perforation in the wrapper).

As to independent claim 26, as noted above, Bale et al. teach all that is claimed.

As to claim 33, Bale et al. teach that a non-zero distance is kept between the second layer and the "distal end" of the cigarette (Fig. 2, ref. no. 9 and 22, the end of the mouthpiece 22 is a "distal end" of the cigarette and the second layer does not extend all the way to the mouthpiece distal end of the cigarette).

As to independent claims 39 and 56, as noted above, Bale et al. teaches all that is claimed in claims 39 and 56, including a smoking article not having an ignition element. Reference number 12 shown in Figure 2 of Bale et al. may be construed to be both an "ignition element" and merely a wrapper. In the context of claims 39 and 56, the reference number 12 is deemed to be a wrapper. In the context of claims 41 and 64, reference number 12 is deemed to be both a wrapper and an ignition element.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 35-36, 49, 51-52, 60-61, 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bale et al. EP 227424 in view of Riggs et al. 5551451 and Blakley et al. 5360023.

Bale et al. substantially teaches applicant's claimed invention. See the above 35 U.S.C. §102(b) rejection for Bale et al.'s teachings. However, the second layer extending 1mm to 5mm from the distal end or at least a non-zero distance from the end, the perforations having different sizes, the smaller sized perforation located closer to the distal end than the larger sized perforation, the perforations being arranged in a pattern, and the smoking material being located in a smoking material section with a perforation near the base end.

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Riggs et al. also teach that the second layer extends to a non-zero distance L from the distal end of said article at which said smoking material is exposed (Fig. 1, ref. no. 16, 17, 18, as can be seen from the drawing 17 extends to and beyond the smoking material 16). It would have been obvious to combine Riggs et al.'s composite layer with Bale et al.'s smoking article because Bale et al. teach the use of aluminum foil and its similar materials (page 2-3, lines 24-30, 1-8). Thus, one of ordinary skill in the art would recognize the similarity and desirability of using a foil paper composite at a non-zero distance from the distal end of the cigarette.

Blakley et al. teach that the plurality of perforations are arranged in a pattern (Fig. 2, ref. no. 60, the perforations are arranged in lines). Blakley et al. further teaches that "size, number and relative positioning of the individual perforations can vary depending on the desired characteristics." (col. 4, lines 20-25). Thus, Blakley et al.'s teaching as to the size, number and pattern makes applicant's claims to the different sized holes and the positioning of the smaller holes closer the distal end obvious in view of Blakley et al. because at the distal end of the cigarette, where the end of the cigarette is exposed to the atmosphere, less air is needed to maintain the igniting element at a stable temperature and thus smaller holes would suffice. While, at further up the cigarette, larger holes would be required to maintain the heat because the aluminum foil of Riggs et al. and Bale et al. would be dissipating the heat from the ignition source. Finally, Blakley et al. teach that placing the smoking material into a smoking material section and the perforation at the base end (Fig. 1, ref. no. 20 and 60, the perforations 60 extend all the way to the filter 32, which is the base end). It would have been obvious to combine Blakley et al. with

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Riggs et al. because doing so would have provided a cigarette with more even burning characteristics and would permit the ignition device of Riggs et al. to be supplied with air and thus maintain a stable heat source that would be difficult to achieve without Blakley et al.'s teaching.

Moreover, applicant's claim to the 1 mm to 5 mm range of extension for the second layer from the distal end is deemed obvious in view of Riggs et al.'s Figure 1, reference numbers 14 and 17. It appears that the aluminum foil/paper element 17 extends up to and beyond the distal end of the tobacco material 16 but about one-third of the length of the fuel element 10, which according to Riggs et al. is 12 mm (col. 11, line 1). Thus, the distance is about 4 mm and thus applicant's range is rendered obvious.

It would have been prima facie obvious at the time the invention was made to combine Blakley et al.'s patterns of holes, and Riggs et al.'s composite wrapper material spaced from the distal end of the cigarette with Bale et al.'s tobacco product because doing so would provide for more even combustion of the tobacco and permit the fuel element to maintain its proper temperature.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Colaianni whose telephone number is (703) 305-5493. The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin, can be reached on (703) 308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

A handwritten signature in cursive script, appearing to read "Michael Colaianni", with a horizontal line extending from the end of the signature.

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December 6, 2002

MICHAEL COLAIANNI
PRIMARY EXAMINER